

Exe Estuary Interim Management Plan 2012 – 2015

Protecting our Estuary for future generations



Preface

This report has been prepared by the Exe Estuary Management Partnership. The work has been made possible through the Living with a Changing Coast (LiCCo) project. The Partnership acknowledges this support and the valuable contributions made by all of those who use and value the Exe Estuary. This Interim Management Plan updates the 2006 - 2011 Exe Estuary Management Plan and will cover the period until 2015.

The "Exe Estuary Interim Management Plan 2012 - 2015" forms the second part of the review process. It outlines policies, issues and three year objectives to ensure sustainable use of the Exe Estuary for the future. Integration with spatial planning and informed management activity will strengthen our commitment to this valuable area for the future.

The "Exe Estuary Interim Management Plan 2012 - 2015" is supported by the "State of the Exe 2006". The "State of the Exe 2006" (scheduled for review and updating 2012/13) describes the changing pressures, natural processes, varied uses and quality of the Estuary, and how these aspects interact with each other. It was used to identify the management measures set out in the Management Plan.

Acknowledgments

We would like to thank all of the people who have contributed to this report: the local people who use the Estuary and have offered their time, opinions and experience; the professionals who monitor, manage and protect the Estuary and have offered their advice and views for the future; the Partners of the Exe Estuary Management Partnership who contribute daily to its successful functioning, both professionally and financially; and the members of the Living with a Changing Coast (LiCCo) Project for the valuable trans-national experience and input.

The Exe Estuary Management Partnership would also like to thank Stephanie Clark for the major contribution that she has made to the production of this document.

The Management Plan review was facilitated and funded by the Exe Estuary Management Partnership and the European Living with a Changing Coast (LiCCo) project.



for birds
for people
for ever



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List of Abbreviations

AONB: Area of Outstanding Natural Beauty
CROW: Countryside and Rights of Way Act 2000
Defra: Department for Environment, Food and Rural Affairs
D&SIFCA: Devon and Severn Inshore Fisheries and Conservation Authority
EA: Environment Agency
EEMP: Exe Estuary Management Partnership
LiCCo: Living with a Changing Coast
LNR: Local Nature Reserve
MMO: Marine Management Organisation
MoD: Ministry of Defence
OS: Ordnance Survey
PROW: Public Rights of Way
RSPB: Royal Society for the Protection of Birds
SAC: Special Area of Conservation
SPA: Special Protection Area
SSSI: Site of Special Scientific Interest

Source of the information presented in the images

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Source of the information presented in Figure 1

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Please note that the software used for the mapping only allows kilometres to be spelt as "kilometers".

1. Background to the Exe Estuary Management Plan



Image1: Aerial view of the Exe Estuary

Area of Study

The Exe Estuary Management Plan study area is the area bounded by the 5m contour line around the Estuary (see Figure 1)

The main focus of the management work is, therefore, on the sub-tidal, inter-tidal, shore and nearby areas of the River Exe between Exeter and Exmouth/Dawlish.



Key

- Settlements
- Land
- Inter Tidal zone
- Tidal Water
- Exe Estuary Partnership Management Boundary

Figure 1: The area managed by the Exe Estuary Partnership
 Source: Devon County Council and OS

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 100019783. 2005

The Exe Estuary

The Exe Estuary covers 3,000 hectares of diverse aquatic and terrestrial habitat. It is internationally designated as an Estuary of great importance for nature conservation. Protected from the open sea by the sand spits of Dawlish Warren and Pole Sands, the Estuary lends itself beautifully to a feeding and breeding retreat for birds. This also makes it a perfect open space for a wide range of recreational activities, shellfish cultivation and tourism.

The need for an Interim Management Plan:

The Exe Estuary Interim Management Plan is written to provide guidance on delivering statutory compliance and best practice in managing this special place. It will:

Promote the sustainable use of the Exe Estuary, balancing the demands made on its natural resources and resolving conflicts of interest where they arise.

Provide a framework for the co-ordinated management of the Estuary and improve communications between users and organisations with authority over the Exe.

The Exe Estuary Interim Management Plan 2012 - 2015 was created following a review of the 2006-2011 Management Plan. The review identified a number of objectives that had not been delivered within the five year period that the Management Plan was in place. More information about the findings of the Management Plan Review can be found in the Management Plan Review spreadsheet and Management Plan Review Summary report. These undelivered objectives are highlighted within this Interim Management Plan 2012-2015, to be addressed over the next three years, after which a second review will be carried out.

The contents of the Interim Management Plan:

- Potential management issues
- Policy guidance
- Objectives for each sector of activity for the next three years

The Exe Estuary Interim Management Plan provides a description of **potential management issues** together with the **policy guidance** necessary to resolve them. It also sets out the **objectives for each sector of activity for the next three years**, i.e. what we want to achieve.

The Exe Estuary Interim Management Plan incorporates the Management Scheme for the Special Protection Area (Regulation 34, Habitats Directive). Therefore, it identifies objectives which aim to achieve favourable condition of the wildlife and supporting habitats protected under the Special Protection Area (SPA). **These objectives appear in bold in each relevant section of the document.** Relevant actions will apply to the Competent Authorities that have a statutory responsibility for the protection of the SPA.

The Interim Management Plan: Where has it come from and where does it take us?

The Exe Estuary Interim Management Plan:

- Is based on the scientific report: "[The State of the Exe 2006](#)"
- Identifies specific management measures which will be implemented through an annual "[Action Plan](#)"
- Shall be applied until completion of the [State of the Exe review](#)

The "State of the Exe 2006" displays the information currently available on the condition of the environment. It shows how the Estuary has changed over the years and illustrates its present condition. The report identifies the potential management issues on the Exe. These issues have been addressed in the Interim Management Plan. The "State of the Exe 2012" is currently being produced and will inform the next Management Plan.

The Action Plans indicate how the Interim Management Plan will be implemented and identifies who is responsible for a given action.

Copies of the “The State of the Exe 2006” and the “Exe Estuary Annual Action Plan” can be obtained from the Exe Estuary Officer, Devon County Council, County Hall, Exeter, and are also available on the Partnership’s website at www.exe-estuary.org

The Exe Estuary Management Partnership

The Exe Estuary Management Partnership has existed since the mid 1990s. Due to the complex array of organisations with (sometimes overlapping) management responsibilities for different aspects of the Estuary, a partnership approach is the most effective model by which to achieve consistent management of the Estuary resource as a whole. The Exe Estuary Management Partnership is the management group responsible for the delivery of the SPA management scheme.

The structure of the Exe Estuary Management Partnership has recently been revised by the funding Partners (See Figure 2). The main priorities of the structure review were to ensure that the Partnership is focussed on delivering Estuary-related work and has an effective, streamlined structure. Users of the Estuary will retain a key role in the Partnership and the Public Forum will continue through annual public meetings.

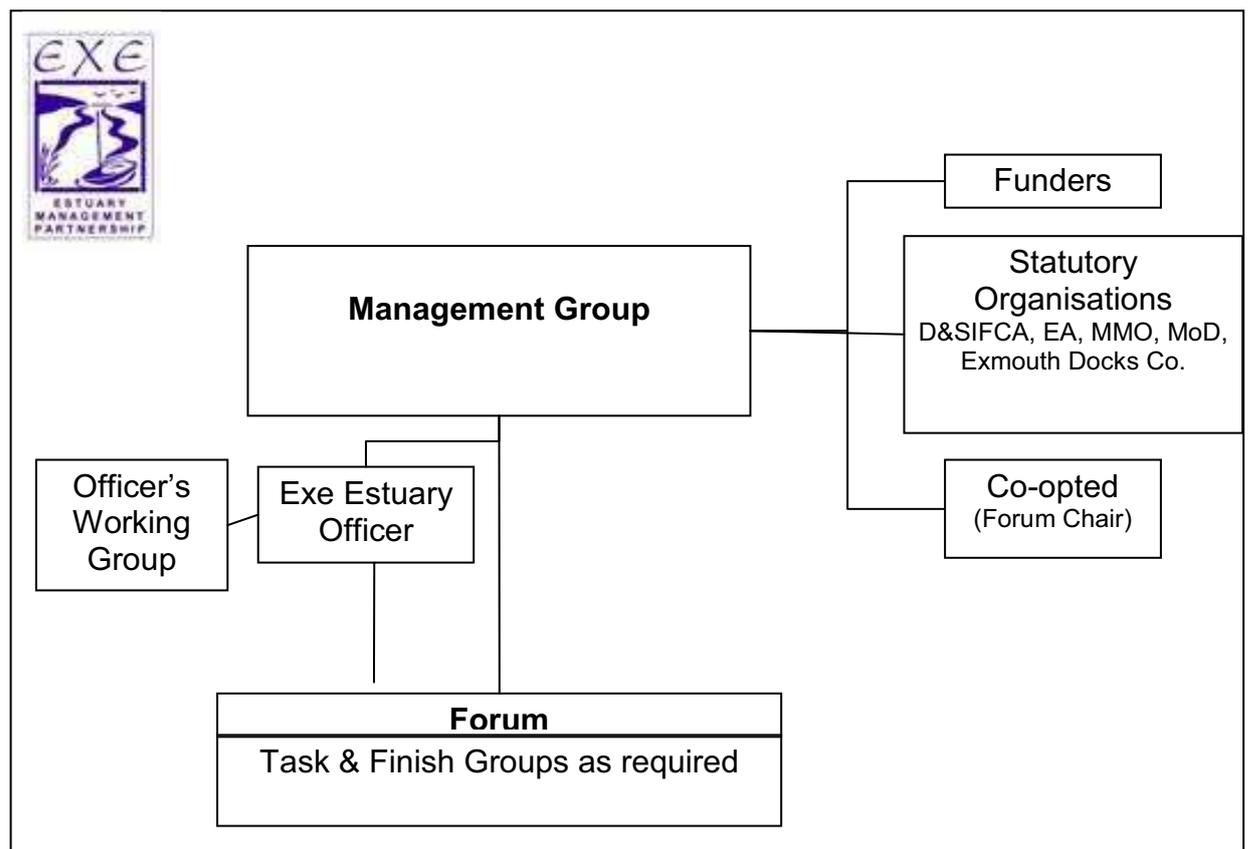


Figure 2: Structure of the Exe Estuary Management Partnership (see page 2 for explanation of abbreviations)

Delivery of the Exe Estuary Interim Management Plan 2012-2015

Due to the complex array of organisations with management responsibilities for different aspects of the Exe Estuary, a Partnership approach is the most effective model by which to achieve consistent management of the Estuary resource as a whole. The Exe Estuary Management Partnership is the management group for the delivery of the statutory SPA management scheme.

The Exe Estuary Interim Management Plan 2012 is jointly agreed by Partner organisations and local community representatives. Priorities for action were decided through a public consultation exercise in 2006. This Interim Management Plan will be delivered through annual Action Plans in a process lead by the Exe Estuary Officer.

The Interim Management Plan 2012 will include objectives and actions that relate to the Living with a Changing Coast (LiCCo) project. This is a European funded project to help coastal communities understand, prepare for and adapt to future changes to the coastline associated with predicted impacts of sea level rise and climate change. It is funded until September 2014 via the EU INTERREG IVA cross Channel Programme and is being led by the Environment Agency South West, with a range of French partners, and English partners that include the National Trust, Devon and Dorset County Councils, and the Exe Estuary Management Partnership.

The following text in **green identifies actions that contribute to, and are partly or wholly funded by the LiCCo project**, the text in **black identifies Partnership actions**.

Action Plan for Year 1: April 2012 – March 2013

- Review and update the State of the Exe 2006 report.
- Apply an Interim Management Plan until completion of State of the Exe review.
- Support management measures as recommended by Disturbance Study results, working with user groups where appropriate and monitoring management prescriptions.
- Survey the number and location of crab tiles on the estuary and compare to previous studies to ensure voluntary code and relevant bylaws are being adhered to.
- Support development of the Exe Estuary Strategy and deliver consultation events to engage local communities with coastal planning.
- Continue to work with the District and City Councils to progress Local Development Frameworks.
- Annual Review 2012/13: Create report reviewing Partnership's achievements in 2012/13.
- Action Plan 2013/14: Prepare 2013/14 Action Plan for approval by Management Partnership.
- Education: Deliver at least 10 half day sessions at Exmouth Local Nature Reserve and 5 full day sessions at Exminster Marshes involving 500 students in total.
- Clean Up Events: Deliver two Clean Up events, one in spring and one in autumn, involving as many sites as possible.
- Exe Action and Issue Groups: Involve local communities in the management of the estuary and discussion of relevant issues through the organisation of Task and Finish groups to deliver specific actions or address current issues when required.
- Keep Exe Estuary website up to date and informative with information about the LiCCo project including links to the project site.
- Consider resubmission of revised bid for Heritage Trail project to Heritage Lottery Fund.

- Monitor additional need for signage on the Exe Estuary Trail.
- Network Development: Complete review of the stakeholder database with gap analysis.
- Work with relevant partners to deliver the 2012 Exmouth Earth Festival. Incorporate successful elements of previous events.
- Promotion of LiCCo: Support creation of LiCCo promotional material and actively use. Contribute to project management by attending LiCCo Task Groups, events and conferences as required.
- Investigate sources of long-term Partnership funding as well as for one-off projects and events including development levies through the LDF.
- Continue work with local users of the Exe to address conflict.
- Summarise BAP targets and identify actions to achieve them. Publicise to Competent Authorities
- Support habitat recreation programmes as an example of mitigation for climate change.
- Water quality information publicised and updated.
- Deliver the core outputs of the Exe Estuary Partnership including four editions of the **Exe Press newsletter**, **up to date Partnership website**, news bulletins for inclusion in local community newsletters, Press Releases for local media, one **public Forum event**, attendance at all relevant meetings associated with the Exe Estuary, maintain regular contact with members and Partners through the Officers Working Group and Management Group, monitor leaflet stocks and maintenance of the Partnership's Contacts Database for use by the Estuary Officer.

Action Plan for Year 2: April 2013 – March 2014

- Develop an estuary-wide agreement on management of abandoned boats and hulks.
- Dissemination of the messages of the LiCCo project:
 - Develop calendar of local existing events and details of interested communities.
 - Undertake a study of best locations to house interpretive materials and develop a schedule of stakeholder events.
 - Organise and host events in the Exe Estuary to respond to community concerns about sites, as required, e.g. at Dawlish Warren, Lower Clyst, Exmouth and Powderham banks.
 - Work with Stuart Line Cruises to develop their commentary for cruises along the Jurassic coast as well as in the Exe.
 - Distribution of leaflets and posters.
 - Develop web based information, such as visualisations and films, specific to the Exe and available through the Exe Estuary website.
- Develop Exe specific education materials to use with schools and other audiences, enabling them to explore coastal management issues and the associated risks and costs.
 - Investigate opportunities for new technology, such as an 'I phone Application' to be used in conjunction with a visit to the Exe.
 - Assist with development of media for raising awareness of impacts of climate change.
 - Dissemination of information to relevant bodies such as the Coastal Partnership Working Group, Local Planning Authorities and Local community.
- Revise the Exe Estuary Management Plan to update and reflect lessons learnt through social profiling and communication strategy works.

- Possible resubmission to Heritage Lottery Fund of bid for the Heritage Trail.
- Support the delivery of a Plain English report outlining the changes in coastline management practice proposed by the Exe Estuary Strategy and their potential impacts.
- Plan Festival, incorporating successful elements of previous events.
- Provide on site educational events to teach local children about the ecology, management and coastal processes within the estuary.
- Promote a better understanding of the likely impacts of climate change and how local communities can adapt.
- Ensure synergy in the delivery of the LiCCO project and Exe Estuary Strategy by combining key elements and objectives, and sharing and learning from best practice achieved in the UK and France as part of the LiCCo project.
- Identify and promote potential opportunities and mitigation strategies to benefit the Exe's local communities.
- Identify and meet with local User Groups to shape management measures.
- Contribute to LiCCo promotional strategy where appropriate.
- Investigate a review of the Environmental Health Audit.
- Review zonation scheme for activities on the Exe.
- Sustainable fisheries: Audit existing licences and permits. Investigate if it is necessary to carry out any survey / monitoring work to give confidence in the sustainability / impact of existing measures.
- Deliver the core outputs of the Exe Estuary Partnership including four editions of the **Exe Press newsletter**, **up to date Partnership website**, news bulletins for inclusion in local community newsletters, Press Releases for local media, one **public Forum event**, attendance at all relevant meetings associated with the Exe Estuary, maintain regular contact with members and Partners through the Officers Working Group and Management Group, monitor leaflet stocks and maintenance of the Partnership's Contacts Database for use by the Estuary Officer.
- Other actions as circumstances require to contribute to delivery of Interim Management Plan objectives.

Action Plan for Year 3: April 2014 – March 2015

- Pursue implementation of recommendations from the reviewed Environmental Health Audit.
- Implement sustainable fisheries management measures.
- **Revise the Exe Estuary Management Plan to update and reflect lessons learnt through social profiling and communication strategy works.**
- Possible resubmission of bid to Heritage Lottery Fund for the Heritage Trail
- Dissemination of the messages of the LiCCo project:
 - Organise and host events in the Exe Estuary to respond to community concerns about sites, as required: E.g. at Dawlish Warren, Lower Clyst, Exmouth and Powderham banks.
 - Distribution of leaflets and posters.

- - Use materials developed through the LiCCo project with local schools and other audiences, enabling them to explore coastline management issues and the associated risks and costs.
- Assist with development of media for raising awareness of impacts of climate change and how local communities can adapt to these impacts.
- Dissemination of information to relevant bodies such as the Coastal Partnership Working Group, Local Planning Authorities and Local community.
- Plan Festival, incorporating successful elements of previous events.
- Provide on site educational events to teach local children about the ecology, management and coastal processes within the estuary.
- Promote a better understanding of the likely impacts of climate change and how local communities can adapt.
- Ensure synergy in the delivery of the LiCCO project and Exe Estuary Strategy by combining key elements and objectives, and sharing and learning from best practice achieved in the UK and France as part of the LiCCo project.
- Contribute to LiCCo promotional strategy where appropriate.
- Deliver the core outputs of the Exe Estuary Partnership including production of four editions of the **Exe Press newsletter**; **maintenance of Partnership website**; production of news bulletins for inclusion in local community newsletters and Press Releases for local media; organisation of one **public Forum event**; attendance at relevant meetings associated with the Exe Estuary; maintenance of regular contact with members and Partners through the Officer's Working Group and Management Group; monitoring of leaflet stocks; and maintenance of the Partnership's Contacts Database for use by the Estuary Officer.
- Other actions as circumstances require to contribute to delivery of Interim Management Plan objectives.

2. Climate Change

Key and statutory organisations:

- Defra
- Environment Agency
- County, District & City Councils
- Natural England
- Climate SW
- Living with a Changing Coast project

Key documents, legislation and statutory plans:

- “A Warm Response; Our Climate Change Challenge”; A DCC Strategy for 2005 and the Foreseeable Future
- County Structure Plan, DCC, 2004
- Municipal Waste Management Strategy for Devon, 2003
- Devon Local Transport Plan, 2006
- “Warming to the Idea; Building resilience to extreme weather & climate change in the SW”; Climate Southwest, 2010
- “A Summary of Climate Risks for the SW of England”; Climate UK, 2012



Image 2: Sunset on the Exe Estuary

Policy

Raise awareness of the causes and impacts of climate change in the Exe Estuary and monitor the changes taking place.

Promote sustainable management to minimise adverse impacts of climate change.

Favour energy-efficient and environmentally sustainable goods and services.

Issues

1. ▶ The impacts of climate change are experienced far beyond the Exe Estuary.
 - ▶ It is difficult to manage the Estuary appropriately through 5 year Management plans when the impacts of climate change are on a far longer timeframe.
 - ▶ Climate change is already affecting, and will continue to impact on all social, environmental and economic aspects of the Estuary.
2. ▶ The contribution of activities within the Exe Estuary to global warming is unknown.
 - ▶ It is difficult to evaluate the potential impact of climate change on specific locations, people or wildlife.
 - ▶ There is a lack of monitoring of climate related impacts on social, economical, environmental aspects of the Estuary.
 - ▶ Funding for monitoring by the local weather station in Exmouth ceased in 2004.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ **Identify the activities within the Exe Estuary that are the main contributors to global warming.**
▶ Minimise the contribution of Exe Estuary activities to global warming.
2. ▶ Use local knowledge and existing surveys to analyse past occurrence of climate related incidents on social, economic and environmental aspects of the Estuary.
▶ Evaluate the impact of climate change on Estuary communities and identify future flood and coastal protection management options, as an outcome of the Exe Estuary Coastal Management Study led by East Devon District Council and the Environment Agency.
▶ **Assess the effects of climate change on the SPA and identify suitable mitigation.**
▶ Identify the areas which are the most vulnerable to climate change, prioritise and suggest adequate sustainable management, and “climate proof” the chosen management method for the following 50 years as recommended in the Devon Climate Change Strategy.
▶ Develop an integrated monitoring method for analysing the impact of climate change on the Estuary in the short, medium and long term, in line with the wider Devon Climate Impact Assessment.
3. ▶ Encourage responsible behaviour and increase public understanding of people’s contribution to climate change and the likelihood of potential impacts.

This section is closely linked to the following:

3. Natural and Historical Environment

4. The Use of the Exe

5. Environmental Quality

6. Promoting Understanding of the Exe

7. Protecting the Exe

3.1 Habitats and Designations

Key and statutory organisations:

- Defra
- Natural England
- Environment Agency
- RSPB
- Devon Wildlife Trust
- County, District & City Councils

Key documents, legislation and statutory plans:

- Birds Directive 79/409/EC
- CROW Act 2000
- Dawlish Warren Management Plan, 2005
- Exmouth Local Nature Reserve Management Plan, 2000
- Regulation 33 English Nature, 2001
- RSBP Exe Estuary Nature Reserve Management Plans, 1996
- The Habitats Regulations
- Biodiversity Action Plans



Image 3: Eelgrass at Dawlish Warren

Key achievements

● The majority of the Exe Estuary SSSI has reached a favourable condition ● Over-wintering populations and internationally important species such as Avocet and Black Tailed Godwit have increased. ● Contribution was made to the eelgrass survey in 2002. ● The Sub Tidal survey was completed in 2005.

Policy

Maintain the nature conservation features of the designated sites in favourable condition and, where possible, enhance them.

Issues

1. ▶ Lack of knowledge of the implications of designated site legislation for Competent and Relevant Authorities.
▶ Limited public understanding of the benefits of designated sites.
2. ▶ Parts of designated sites are in unfavourable condition.
▶ Loss and deterioration of intertidal habitats due to development, provision of coastal defences and sea level rise.
▶ Impact of invasive species.
3. ▶ Lack of an integrated monitoring plan for the Estuary.
4. ▶ Lack of appropriate management framework for fisheries within the designated sites.
▶ Need to improve further the management of wildfowling.
▶ Lack of management and enforcement of recreation activities on the designated features.
▶ Environmentally inappropriate farming practices on isolated sites.
▶ Impact of diffuse pollution.
▶ Cumulative effect of isolated development on the Estuary not being assessed.
5. ▶ Climate change impacts on habitat loss and change.

6. ▶ Lack of knowledge of the impact of sediment and hydrodynamics on the habitats and designated areas.
7. ▶ Some areas of nature conservation value fall outside present designations.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ Increase awareness of all users of the implications of the site designations.
▶ Ensure all Estuary users comply with designated site legislation.
2. ▶ Achieve favourable condition status of the SPA, SAC and SSSIs.
▶ Identify all habitat re-creation opportunities and progress with the priority sites.
▶ Ensure that, wherever suitable, habitats are seen as a natural form of sea defence and that opportunity is given to protect, maintain and enhance them.
▶ Identify ways to enhance the nature conservation value of the area covered by the Exe Estuary Management Plan.
3. ▶ Produce and implement an integrated monitoring plan for the designated sites.
4. ▶ Develop and produce an appropriate management framework to control and manage all fisheries.
▶ Limit conflict with recreational activities and protect nature conservation through revision of existing zoning.
▶ Ensure moorings within the Estuary do not affect the nature conservation features of the designated sites through the development of an integrated mooring management plan.
▶ Ensure all farming activities within designated sites achieve nature conservation objectives.
▶ Reduce diffuse pollution inputs through improved farming practices upstream.
▶ Ensure recreational access and use does not adversely affect the designated sites.
5. ▶ Improve understanding of the implications of climate change for management of the Estuary.
6. ▶ Ensure all flood and coastal defence plans adhere to nature conservation legislation.
7. ▶ Ensure all other areas of high conservation value are recognised and designated.

This section is closely linked to the following:



3.2 Wildlife Species

Key and statutory organisations:

- Defra
- Local Authorities
- Natural England
- RSPB
- Devon Wildlife Trust

Key documents, legislation and statutory plans:

- Devon Biodiversity Action Plan
- UK Biodiversity Action Plan
- Teignbridge District Council Biodiversity Action Plan
- East Devon District Council Biodiversity Action Plan



Image 4: Brent Geese feeding

Key Achievements

- A key contribution was made to the objectives and targets for the Estuary as stated in the Biodiversity Action Plan.
- A contribution was made to the analysis of the “WeBs” count data with the RSPB.
- Agreement between RSPB and the Devon Wildfowlers’ and Conservation Association was facilitated.
- Ringed Plovers are breeding successfully at Dawlish Warren.
- Continued grazing has helped to control and manage Dawlish Warren scrubland.

Policy

Ensure that no net loss of biodiversity occurs within the management plan area and where possible, identify enhancement opportunities.

Issues

1. ► Lack of understanding of the Biodiversity Action Plan process and issues.
2. ► Loss of biodiversity due to development pressures (including provision of coastal defences) and sea level rise.
 - Declines in some farmland and other breeding birds.
 - Impact of invasive species.
 - Disturbance of biodiversity from recreational, commercial and military activities.
3. ► Lack of an integrated monitoring plan within the Estuary.
4. ► Impact on biodiversity associated with lack of appropriate management framework for fishing.
 - Impact of recreational activities on biodiversity linked to lack of management and enforcement.
5. ► Impact of climate change on biodiversity.
6. ► Difficult to place a financial value on biodiversity.
7. ► Direct impact of waste and litter on biodiversity.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ► Meet the Biodiversity Action Plan targets relevant to the EEMP area.
2. ► Safeguard biodiversity by assessing the cumulative effects of development and developing best practice guidance.
 - Halt the decline in the breeding of farmland birds and increase breeding of key species through proactive targeting of agri-environment schemes.
 - Minimise the adverse impacts of recreational, commercial and military activities wherever possible.
3. ► Ensure all biodiversity interest is appropriately monitored.
4. ► **Develop and produce an appropriate management framework to control and manage all fisheries.**
 - Limit conflict between wildlife and recreation, and protect biodiversity through revision of the zonation scheme.
5. ► Improve understanding of the implications of climate change on biodiversity.
6. ► Achieve greater appreciation and awareness of biodiversity.
 - Assess the value of biodiversity to EEMP area.
7. ► Increase awareness of the threats posed to wildlife by the presence of litter and waste on the Estuary.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

4.1 Farming and Farmed landscape

4.2 Fisheries

4.3 Recreation

4.4 Tourism

4.5 Public Transport and Access

5.1 Air Quality

5.2 Water Quality

5.3 Waste Management and Recycling

6.1 Education and Interpretation

7.1 Contingency Planning

7.2 Coastal Defence and Shoreline Management

7.3 Spatial Planning

3.3 Landscape

Key and statutory organisations:

- County, District & City Councils
- Defra
- Natural England
- East Devon AONB
- Jurassic Coast World Heritage Site
- SW Protected Landscapes Forum

Key documents, legislation and statutory plans:

- Devon Landscape Strategy, 2004
- Devon Landscape, 2002
- Country Planning Act, 1990
- County Structure Plan, 2004
- Regional Spatial Strategy for the South West, 2005
- Local Development Framework documents



Image 5: Landscape around the Exe Estuary - Source: Adrian Evans

Key Achievements

- Working closely with the Local Planning Authorities, awareness has been raised of the importance of the landscape when dealing with planning applications and the sensitivity of the Estuary to development.

Policy

Promote understanding and appreciation of the natural and cultural landscape of the Exe Estuary.

Support the delivery of environmental schemes aimed at maintaining and improving the landscape character and natural resources of the Estuary.

Issues

1. ► Potential loss of the Estuary landscape entity (zone 5 of the landscape strategy) associated with subdivision of the current area into relevant future sub-sections.
2. ► Visual impact of substantial strategic development along the Estuary, such as the M5 and the Royal Marine Commando Barracks.
 - Visual impact of increased development on the landscape of the Estuary.
 - Conflict with inappropriate industries sited next to the Estuary and settlement of marine related business.
 - Visual impact of recreation and tourism facilities on the landscape.
3. ► Potential for changes in agricultural practices to have a significant effect on the Estuary's landscape character, especially in sensitive areas, such as the Exminster and Powderham Marshes.
4. ► Visual impact of development outside the Exe Estuary Partnership boundary on the Estuary landscape.
5. ► Potential impact of coastal defences on visual aspect of the landscape.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ► Ensure that all relevant authorities treat the Estuary as a single landscape entity, and that land management advice is targeted to maintain the distinctive nature of the Estuary's landscape.
2. ► Ensure that proper consideration is given to the character of the Exe Estuary landscape when major strategic developments are proposed.
 - Ensure that existing landscape policies are adhered to when developing urbanised areas.
 - **Promote low visual impact building when allowing the development of marine and other commercial businesses (regarded as a regional and sub-regional economic growth priority).**
 - Encourage new recreation and tourism initiatives to promote and help celebrate the unique and distinctive nature of the Estuary's landscape within their activities and promotional tools.
3. ► **Ensure that land management schemes maintain the distinctive character of the Estuary landscape.**
4. ► **Work with the Local Planning Authorities to limit the visual impact of development visible from the EEMP area by developing a planning protocol.**
5. ► Consider and limit the visual impact of coastal defences on the landscape wherever possible.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.4 History and Archaeology

4.1 Farming and Farmed landscape

4.3 Recreation

4.4 Tourism

4.5 Public Transport and Access

4.6 Commercial and Other Uses

6.1 Education and Interpretation

7.2 Coastal Defence and Shoreline Management

7.3 Spatial Planning

3.4 History and Archaeology

Key and statutory organisations:

- English Heritage
- Environment Agency
- Defra
- Local Authorities
- National Trust
- RSPB

Key documents, legislation and statutory plans:

- “Coastal Defence and the Historic Environment”, English Heritage, 2003
- “Taking to the Water”: Policy for the Management of Maritime Archaeology in England, English Heritage, 2002
- “The Human Habitat: Devon’s Historic Environment”, Devon County Council Role Action Plan, 2003



Image 6: Historic hulk and boats at Topsham

Key Achievements ;

- Support has been given to the ongoing study on historic hulks led by the University of Plymouth.

Policy

Ensure that the historical and archaeological resources of the Estuary are safeguarded, conserved and, where appropriate, promoted.

Issues

1. ► Potential exposure, damage and/or loss of historical and archaeological features due to pressures such as development, dredging, coastal defence management, and other human activities.
 - Potential damage or loss of historical and archaeological features due to changing land use and agricultural practices in the Estuary hinterland.
2. ► Potential exposure and damage of historical and archaeological sites and related evidence due to the impacts of climate change, such as coastal erosion, sea level rise and increased storminess.
 - Unknown impact of potential water level changes likely to alter archaeological preservation conditions.
3. ► Lack of information concerning the extent of the Estuary’s archaeological and historical resources and features.
 - Lack of promotion of existing cultural and heritage features along public access routes.
4. ► Lack of understanding of the value of historical and archaeological sites and the need to protect them.
 - Loss of historical features perceived as an “eyesore”.
 - Potential under-reporting of archaeological finds on land, in the intertidal zone and at sea.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ Ensure appropriate consideration of historical and archaeological interest when assessing development, dredging and coastal defence proposals, and ensure early implementation of existing consultation procedure.
 - ▶ Ensure appropriate action is taken following archaeological consultation results.
 - ▶ Encourage landowners to enter into Environmental Stewardship Schemes and to maximise the historical and archaeological component of these.
2. ▶ Ensure that natural coastal processes such as coastal erosion and sea level rise affecting historical and archaeological sites is monitored and appropriate action taken.
 - ▶ Support continued monitoring of the condition of historical and archaeological sites, especially those threatened by erosion, sea level rise or potential development.
3. ▶ Improve the general level of understanding of the value and sensitivity of historical and archaeological sites, features and related evidence.
 - ▶ Take account of cultural and heritage features when managing the public right of way network.
 - ▶ Take opportunities to celebrate the historic heritage of the Exe.
4. ▶ **Raise awareness of existing reporting schemes when archaeological or historical discoveries are made on land, at sea or in the inter-tidal zone e.g. informing the Exeter Museum Finds Liaison Officer, the Historic Environment Record, the Receiver of Wrecks.**

This section is closely linked to the following:

2. Climate Change

4.1 Farming and Farmed landscape

4.3 Recreation

4.4 Tourism

4.5 Public Transport and Access

6.1 Education and Interpretation

7.2 Coastal Defence and Shoreline Management

7.3 Spatial Planning

4.1 Farming and farmed landscape

Key and statutory organisations:

- Defra
- Environment Agency
- Local Authorities
- Natural England
- National Farmers Union
- Country Landowners Association

Key documents, legislation and statutory plans:

- Environmental Stewardship Scheme
- Exe Catchment Abstraction Management Strategy, Environment Agency, 2003
- Regulation 33, English Nature, 2001
- The Agricultural Waste Management Regulations, 2006
- Water Framework Directive 2000/60/EC
- Exe Catchment Flood Management Plan, 2009



Image 7: Grazing at Powderham

Key achievements

● Thanks to publicity of farming and land management issues, communication with agricultural and land owner interests has increased. ● The majority of agricultural land adjacent to the Estuary is now within a Stewardship agreement. ● Practical support for achieving more sustainable land management through involvement with the Lower Clyst Project.

Policy

Facilitate the implementation of sustainable agriculture practices through consultation with the farming community and relevant regulatory organisations.

Issues

1. ► Impact of existing farming practices on the decline of farmland species and other breeding bird populations.
2. ► Lack of research on the impact of farming practices on water quality through diffuse pollution and soil erosion.
 - Unknown impact of air pollution on soil quality.
3. ► Farming practices and rapid changes in farming practices as they follow the market or price changes, which affects the landscape as well as water and soil quality.
4. ► Farming activity is only viable through payment subsidies or other mechanisms of financial support.
 - Uncertainty of continued economic viability to support the current mixture of farming.
 - Complexity of funding schemes and guidance at European, national and local level.
5. ► Impact of natural and physical processes on agriculture and farming around the Estuary.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ Halt the decline in the populations of farmland bird species and increase populations of key species through agri-environment schemes.
2. ▶ **Identify further and improve understanding about the link between catchment land use, water quality and sediment deposition in the Estuary (Water Framework Directive activities).**
3. ▶ Support sustainable farming activity.
4. ▶ Maximise benefits of the Environmental Stewardship Scheme (and successor scheme).
▶ Promote frequent reviews of funding schemes to take account of market conditions and ensure continued viability and sustainable practices.
▶ **Proactively identify and implement Countryside Stewardship Agreements to achieve Favourable Condition.**
5. ▶ Identify the effects of natural and physical processes on agricultural and farming around the Estuary.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

3.3 Landscape and Designations

3.4 History and Archaeology

5.1 Air Quality

5.2 Water Quality

6.1 Education and Interpretation

7.2 Coastal Defence and Shoreline Management

4.2 Fisheries

Key and statutory organisations:

- Environment Agency
- Centre for Environment Fisheries and Aquaculture Sciences (CEFAS)
- Defra
- Devon & Severn Inshore Fisheries and Conservation Authority
- Natural England
- Marine Management Organisation

Key documents, legislation and statutory plans:

- Marine Strategy Framework Directive
- Common Fisheries Policy
- Marine and Coastal Access Act 2009
- UK Marine Monitoring & Assessment Strategy
- Bass Protection Order, 1990
- CROW Act, 2000
- DSFC Byelaw 24
- DSFC Regulatory Order, 2006
- Exe Management Plan and Action Plan, Environment Agency
- Habitats Directive 92/43/EC
- Salmon Act, 1986
- Salmon and Freshwater Fisheries Act, 1975
- Shellfish Water Directive 79/923/ECC



Image 8: Mussel diving on the Exe Estuary

Key achievements

- The initial Regulating Order consultation was completed
- A code of conduct for crab tiling has been developed.
- Facilitation work also helped improve dialogue between users and reduce conflict.
- Mussel beds on the Estuary have been mapped.
- Additional areas have been identified for shellfish classification
- Productivity of shellfish beds has been improved.
- A bass nursery area has been designated and maintained to protect juveniles.

Policy

Manage the fisheries resource within the Exe Estuary sustainably.

Issues

1. ▶ Complex consenting processes and regulation, and lack of a flexible management framework for fisheries (shellfisheries and sea fishery).
2. ▶ Lack of economic viability.
 - ▶ Lack of data on the existing resource to facilitate the development of a strategy.
 - ▶ Fishing infrastructure falling into disrepair (oyster racks / crab tiles).
3. ▶ Decrease in salmon stock population.
 - ▶ Unknown impact of climate change on fishery resources.
4. ▶ Impact of fishery management techniques on river bed habitat and maritime archaeology.
 - ▶ Conflict with other users.
5. ▶ Impact of water quality on shellfish quality and price.
 - ▶ Limited water quality testing system and understanding of associated economic impacts.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ► **Develop and implement a flexible and responsive framework for sustainable fisheries management.**
2. ► Improve the viability and productivity of the Exe fishery through working with the local industry and within environmental controls.
 - Investigate the potential for sustainable certification of Exe fisheries.
 - **Investigate potential markets for suitable seafood species, which are currently commercially unexploited.**
 - Undertake regular surveys of the fish stocks to underpin management decisions.
 - Undertake regular (biannual) surveys of crab tiles within the Estuary and promote the Crab Tiling Code of Conduct.
 - **Implement appropriate management controls of crab tiling if it is proved to have an adverse effect on the SSSI or SPA.**
 - Remove all fishing gear and infrastructure that is not being actively used.
3. ► **Continue to protect and enhance the salmon fishery.**
 - Improve understanding of the implications of fisheries on biodiversity.
4. ► **Work with other sectors to develop a code of good practice for sustainable fisheries management.**
 - **Ensure that the fisheries within the Exe are sustainable and have no adverse effect on the condition of the SPA.**
5. ► Work with Regulatory Authorities to safeguard and improve shellfish water quality.
 - Improve water quality testing for the Estuary by continuing to share good practice within the wider European context.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

3.4 History and Archaeology

4.3 Recreation

4.6 Commercial and Other Uses

5.2 Water Quality

6.1 Education and Interpretation

4.3 Recreation

Statutory and main organisations:

- County, District & City Councils
- Environment Agency
- Natural England
- Harbour Authorities
- Maritime and Coastguard Agency
- RSPB
- National Trust

Key documents, legislation and statutory plans:

- CROW Act, 2000
- Dawlish Warren Management Plan, 2005
- Exmouth Local Nature Reserve Management Plan, 2000
- Navigation Acts and byelaws
- RSBP Exe Estuary Nature Reserve Management Plans, 1996



Image 9: Kite surfing on the Exe Estuary

Key achievements

● Support has been given to an Estuary-wide Moorings Association. ● The Exe Police Patrol (boat) was developed and promoted. ● The Kite surfer 'Code of Conduct' was facilitated and promoted. ● Information leaflets were produced about the "Water and Shore Safety" and "Birds on the Estuary". ● A successful "Water Safety Day" was organised and run in 2003. ● Disturbance Study commissioned and completed.

Policy

Promote the safe and sustainable use of the Estuary for recreation activities.

Issues

1. ▶ Disturbance to biodiversity.
 - ▶ Pollution and exploitation of the Estuary.
2. ▶ Lack of awareness of policy restrictions and controls for water based activities.
 - ▶ Lack of compliance with boating safety and mooring standards set by relevant organisations.
 - ▶ Lack of clarity over management of moorings.
3. ▶ Increasing competition for space - insufficient co-ordination in the control of recreation activities on the Estuary.
 - ▶ Unknown cumulative impact of existing activities.
4. ▶ Lack of access, safe access facilities and control of access to the water.
5. ▶ Lack of consideration for all amongst various users of the Estuary, endangering and disturbing other users and wildlife.
 - ▶ Adverse impacts of new recreational activities.
6. ▶ Poor facilities for watersports and insufficient opportunities for training.
 - ▶ Lack of EEMP involvement in taking forward the National Cycle Network route project.
7. ▶ Impact of poor water quality incidences on bathing and recreation.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ Ensure that no recreation activity is causing an adverse effect on the SPA, SSSI or SAC.
▶ **Develop an effective strategy for ensuring that the disturbance caused by recreational activities is minimised.**
2. ▶ **Develop effective ways to promote and educate users about policy restrictions and controls within the Exe Estuary, boating safety and mooring standards.**
▶ Work in partnership with the harbour authority, representing the needs of all stakeholders.
▶ Support enforcement of speed limits on the Estuary.
3. ▶ **Develop and implement a flexible and responsive framework for recreation management**
▶ **Seek to investigate the recreational capacity of the Estuary.**
4. ▶ Support sustainable improvements to access facilities on the Estuary.
5. ▶ Achieve a balance of interests on the Exe where conflicts arise.
▶ **Increase awareness and understanding of each other's needs amongst users of the Exe.**
▶ Continue to work with recreation organisations (e.g. those representing sailing, mooring and angling) to optimise opportunities and minimise conflict and environmental damage.
▶ Promote a comprehensive approach to safety.
▶ **Develop a consensus and acceptable zonation scheme for the various uses. Any zoning plan should include a review of moorings and mooring management.** The zoning plan should be developed to consider what the users would like, and also what is required for the SPA and SSSI.
▶ Facilitate a responsible approach to any new recreation activities emerging on the Exe.
6. ▶ Identify and promote further recreation opportunities and resources on the Estuary.
▶ Develop partnerships to make the best of opportunities presented by the completion of the National Cycle Network.
7. ▶ Seek to diminish the effects of poor water quality incidences on recreation.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

3.3 Landscape and Designations

4.2 Fisheries

4.4 Tourism

4.5 Public Transport and Access

5.2 Water Quality

5.1 Air Quality

6.1 Education and Interpretation

7.3 Spatial Planning

4.4 Tourism

Key and statutory organisations:

- Devon County Council
- District Councils
- Natural England
- South West Tourism Alliance
- South West Food and Drink
- Chambers of Commerce
- Tourist Information Centres
- Local Tourism Groups

Key documents, legislation and statutory plans:

- Dawlish Warren Management Plan
- Devon Economic Development Strategy, 2005-2008
- “Devon to 2016”: Devon Structure Plan, 2001-2016
- East Devon District Council Tourism Strategy
- Exeter Draft Tourism Strategy
- Exmouth Regeneration Plan
- Teignbridge Tourism Strategy, 2003
- The Regional Tourism Strategy – Towards 2015, South West Tourism



Image 10: Summer day at Dawlish Warren

Key achievements

- The Exe Estuary was promoted through the production and wide distribution of a user guide: “The Exe Estuary Handbook”. ● Partnership publicity is regularly available at local Tourist Information Centres.

Policy

Promote the Exe Estuary as a destination for sustainable tourism.

Issues

1. ▶ The Exe Estuary is not promoted well enough as an all year round destination, emphasising sustainable ecologically based activities.
 - ▶ Changing needs of visitors – decline of the traditional tourism market.
2. ▶ Seasonal public transport around the Estuary and restricted access in places, insufficient for tourism requirements.
3. ▶ Lack of interpretation facilities describing the various aspects of the Exe Estuary.
4. ▶ Positive or negative impact of coastal defence options on the amenity value of beaches.
5. ▶ Impact of poor water quality incidences on tourism.
6. ▶ Increased tourism and its impact on the Estuary, especially in relation to seasonal wildlife sensitivities.
 - ▶ Restricted opportunities along the water front for tourism development.
 - ▶ Lack of promotion of sustainable tourism.
 - ▶ Concern about pollution and litter associated with tourism.
7. ▶ Unknown impact of natural and physical changes on the tourism economy throughout the Estuary.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ Facilitate the promotion of the Estuary. Develop its promotion as a year round destination for ecologically-based activities.
▶ Develop the Exe Estuary “brand”.
2. ▶ Facilitate the creation of a fully integrated transport network, suitable for tourism needs.
3. ▶ Ensure that an improved consistent approach to interpretation of the many aspects of the Estuary is pursued.
4. ▶ Consider and manage the impact of coastal defences and coastal management on beach amenities, wherever possible.
5. ▶ Ensure risk strategies are in place to anticipate threats to tourism.
6. ▶ Ensure that the tourism potential is maintained by protecting the Estuary from over-development.
▶ **Ensure that if tourism development occurs, it is in keeping with all the qualities and designations on the Estuary.**
▶ Increase awareness and understanding of sustainable tourism issues.
7. ▶ Identify the effects of natural, physical changes, and extreme events on tourism.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

3.3 Landscape and Designations

3.4 History and Archaeology

4.3 Recreation

4.5 Public Transport and Access

5.2 Water Quality

5.3 Waste Management and Recycling

6.1 Education and Interpretation

7.1 Contingency Planning

7.2 Coastal Defence and Shoreline Management

7.3 Spatial Planning

4.5 Public Transport and Access

Key and statutory organisations:

- Harbour Authority
- County, District & City Councils
- Town and Parish Councils
- Natural England
- Network Rail
- Sustrans
- Local ferry operators
- Stagecoach
- Exeter Airport

Key documents, legislation and statutory plans:

- Devon Local Transport Plan, 2000
- Disability Discrimination Act, 1995
- Local Transport Plan, 2006-2011
- PROW Improvement Plan, 2005
- Transport Act, 2000



Image 11: Railway at Starcross

Key achievements

- Information about access was provided through the popular 'Exe Explorer' leaflet.
- A draft "Exe Estuary Access Strategy" has been produced.
- A contribution was made to the National Cycle Network consultation process.

Policy

Improve public transport and access along the Estuary in the most sustainable way possible.

Issues

1. ▶ Insufficient co-ordination and linkage of public transport and access across and around the Estuary.
 - ▶ Lack of ferry services (seasonal, infrequent or non existent).
 - ▶ Poor standard of waiting facilities for public transport.
 - ▶ Insufficient use of public/sustainable transport.
 - ▶ Limited access for people with disabilities.
 - ▶ Poor quality of some stretches of footpath around the Estuary.
2. ▶ Concern about scale of CO₂ emissions arising from less sustainable transport modes.
 - ▶ Unknown impact of rail, water and road transport on the Estuary quality and wildlife.
 - ▶ Unknown impact of recreational vessels and vehicles on the Estuary quality and wildlife.
3. ▶ National Cycle Network integration with other forms of transport and possible conflicts with other trail users.
 - ▶ Lack of PROW integration with National Cycle Network route.
4. ▶ Restricted connection between PROW network and various sites of interest along the Estuary.
5. ▶ Impact of natural and physical changes on public transport and access provision.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ Bring about better integration and improvement of public transport and access across and around the Estuary.
 - ▶ Promotion of sustainable transport to access the Estuary.
 - ▶ Facilitate improved access for all.
 - ▶ Support improvements to footpaths around the Estuary where appropriate.
2. ▶ **Understand the CO₂ contribution of different forms of transport.**
 - ▶ Promote use of the most sustainable transportation methods available, including ferry service improvements.
 - ▶ Promote awareness of the effects of various types of public and recreational transport on the Estuary.
3. ▶ Encourage walking and cycling as a means of accessing and exploring the Estuary.
 - ▶ Promote co-ordinated interpretation to improve the walking and cycling experience and appreciation of the Estuary.
 - ▶ Ensure the safe integration of cycle ways and public footpaths.
4. ▶ Promote access to sites of interest, where sustainable, by taking account of relevant features when managing the PROW network.
5. ▶ Identify the effects of natural and physical changes on public transport and access provision, including extreme events.

This section is closely linked to the following:



4.6 Commercial and Other Uses

Key and statutory organisations:

- Business Link
- County, District & City Councils
- Harbour Authority
- Local Businesses Associations
- Armed Forces
- Chambers of Commerce
- Federation of Small Businesses

Key documents, legislation and statutory plans:

- Devon Economic Development Strategy, 2005-2008
- Devon Local Transport Plan, 2000
- Devon Local Transport Plan, 2006-2011
- Devon Structure Plan, 2001-2016
- Merchant Shipping Acts

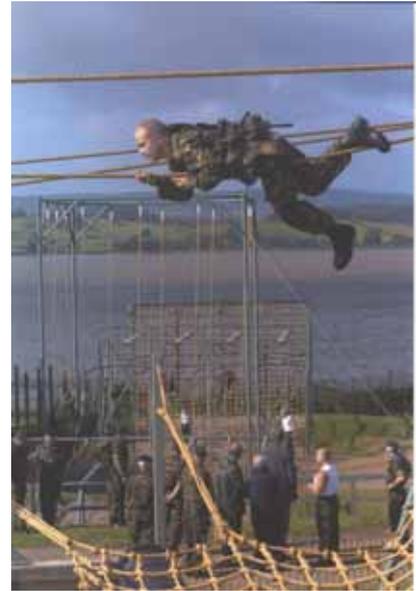


Image 12: Military use of the Estuary – Source CTC Royal Marine

Key achievements

- Support has been given to the Harbour Revision Order process and stakeholder participation has been encouraged.

Policy

Accommodate and encourage management of the Estuary with commercial, industrial and military use, to a sustainable level.

Issues

1. ► Unknown effect of the military, commercial and transport uses on the Estuary.
2. ► Effects of marine related business, and military activity.
► Insufficient understanding of the Estuary by local businesses.
3. ► Failure to invest in marine related industries and lack of analysis of the economic benefits of marine industry.
4. ► Conflict with inappropriate industries sited next to the Estuary.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ► Better understanding of the effects of military and commercial activity on the Estuary.
2. ► Facilitate systematic means of communication with the military.
► Improve the understanding of the Estuary's natural environment and its economic value.
► Influence the decisions of those involved in commercial or military use, encouraging them to use sustainable methods and processes in their activities.
► Work in partnership with the harbour authority, representing the needs of all stakeholders.
3. ► Increase understanding of the marine related business activity on the Estuary and the economic benefits.
► Seek to assist suitable enterprises which promote the natural value of the Estuary.
4. ► Seek to mitigate any negative impact of industries on the Exe Estuary.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

3.3 Landscape and Designations

4.2 Fisheries

4.5 Public Transport and Access

5.1 Air Quality

5.2 Water Quality

5.3 Waste Management and Recycling

6.1 Education and Interpretation

7.2 Coastal Defence and Shoreline Management

7.3 Spatial Planning

5.1 Air Quality

Key and statutory organisations:

- Environment Agency
- European Union
- Local Authorities

Key documents, legislation and statutory plans:

- Environment Act, 1995
- National Air Quality Strategy 2007
- Ambient Air Quality Directive 2008/50/EC
- Air Quality Standard Regulations 2010



Image 13: Air pollution from boat emissions

Key achievements

- Environmental Health Audits and identification of air pollution sources have taken place.
- Low emission transport options, goods and services are chosen when available.

Policy

Maintain and, where necessary, seek to improve air quality on and around the Exe Estuary.

Issues

1. ▶ Impact of transport and boating activity on air quality of the Estuary.
 - ▶ Potential impact of air pollution on public health and biodiversity (both species and habitats).
 - ▶ Potential significant impact of air pollution on soils and water.
2. ▶ Lack of awareness and monitoring of air pollution from boating activities.
3. ▶ Lack of public and general understanding of air quality issues – confusion in identifying the harmful pollutants along the Estuary.
4. ▶ Multiplicity of organisations involved in dealing with air quality.
 - ▶ Inconsistent and insufficient air quality monitoring along the Estuary, which is not considered to be a prime area at risk.
 - ▶ No monitoring of ozone which could be harmful in the future.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ Ensure that transportation targets relating to air quality are met.
 - ▶ Increase the use of alternative and sustainable transport.
 - ▶ Encourage the development of clear quality standards for soil and water to protect key species.
2. ▶ Evaluate the impact of boating activity on the air quality of the Estuary.
 - ▶ Investigative the need to impose an emission limit for boats using the Estuary.
3. ▶ Improve public understanding of the causes and consequences of poor air quality – better awareness and clear identification of harmful pollutants.
 - ▶ Encourage public responsibility for environmental quality.
 - ▶ Continue research to improve understanding of the impact of air pollution on public health, natural processes and biodiversity. Disseminate the results.
4. ▶ Support consistent, regular monitoring of air quality around the Estuary in line with the National Air Quality Strategy and integrating European guidance on ecosystems and air quality monitoring.
 - ▶ Support consistent monitoring of indicator species in the catchment.
 - ▶ Encourage monitoring of ozone levels.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

4.1 Farming and Farmed landscape

4.3 Recreation

4.4 Tourism

4.5 Public Transport and Access

4.6 Commercial and Other Uses

5.2 Water Quality

6.1 Education and Interpretation

5.2 Water Quality

Key and statutory organisations:

- District Councils
- Environment Agency
- European Union
- South West Water

Key documents, legislation and statutory plans:

- Bathing Water Quality Directive 76/160/ECC on Bathing Water Quality
- Exe Catchment Abstraction Management Strategy, Environment Agency, 2003
- Shellfish Water Quality Directive 79/923/ECC
- Water Framework Directive 2000/60/EC
- Water Resources Act, 1991
- Urban Waste Water Treatment Regulations 1994
- Groundwater Directive 2006/118/EC



Image 14: Bathing at Dawlish Warren

Key achievements

- Shellfish and bathing water quality improved over the past five years.
- An Environmental Health Audit undertaken which helped identify sources of water pollution.
- More general approach to land use and water management to be developed at catchment level through the Water Framework Directive and at European level.

Policy

Encourage the implementation of measures to improve water quality within the Exe Estuary. Encourage a responsible and responsive attitude towards water quality for all users of the Exe Estuary.

Issues

1. ▶ Impact of water quality on biodiversity and habitats.
▶ Impact of water quality on farming, fisheries and recreation activities.
2. ▶ Difficult to identify the source of diffuse pollution.
▶ Impact of catchment land use on water quality.
3. ▶ Effects of nutrient enrichment and potential eutrophication from run-off, sewage outfalls and sewage discharge from boating activities.
▶ Impact of communication routes such as the M5 and railway link with the potential for hydrocarbon and heavy metal pollution from both sources.
▶ Potential pollution from oil, chemical and inert material spills, including oil and other hydrocarbon pollution from boating activities and oil storage.
▶ Pollution from heavy metal contaminants and boat maintenance activities.
4. ▶ Water resource management in the catchment reduces dilution in the Estuary.
5. ▶ Low level of public understanding of water pollution causes and consequences.
6. ▶ Impact of storm and flood events on water quality, combined with unknown impact of climate change on regularity of flood incidents. ▶ Storm discharge from sewage treatment works in the Estuary waters.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ **Continue to maintain and improve chemical and biological water quality.**
 - ▶ Complete a review of the consents process for the SPA.
2. ▶ Implement the Water Framework Directive and incorporate new research findings into management decisions.
 - ▶ Further investigate the link between catchment land use, water quality and sediment deposition in the Estuary.
3. ▶ Maintain dialogue with any appropriate industries on site management and co-ordinate partnerships to improve water quality.
 - ▶ **Implement and regularly review the sewage treatment discharge programme.**
 - ▶ Evaluate the impact of transport on the water quality in and around the Estuary.
 - ▶ Deploy contingency plans, if required, and carry out regular pollution contingency plan exercises.
4. ▶ **Continue sustainable management of water abstraction by implementing the Catchment Abstraction Management Strategy.**
5. ▶ Educate and inform about the impact of human activities on water quality.
6. ▶ Evaluate the local impact of climate change on water quality.
7. ▶ Continue to improve the sewage treatment discharge programme and achieve consented conditions.
 - ▶ Reduce oil and hydrocarbon pollution from storage on land and boating activities.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

4.1 Farming and Farmed landscape

4.2 Fisheries

4.3 Recreation

4.4 Tourism

4.5 Public Transport and Access

4.6 Commercial and Other Uses

5.1 Air Quality

5.3 Waste Management and Recycling

6.1 Education and Interpretation

7.1 Contingency Planning

5.3 Waste Management and Recycling

Key and statutory organisations:

- Environment Agency
- Defra
- County, District & City Councils

Key documents, legislation and statutory plans:

- Devon Waste Local Plan, 2005
- Municipal Waste Management Strategy for Devon, Devon County Council, 2003
- Waste Regulations 2011
- WEEE Directive 2012/19/EU



Image 15: Rubbish found on the sand

Key achievements

- Public shoreline clean up events are supported and organised around the Estuary.
- Recycled materials for printing and energy-efficient transport options are chosen when they are available.

Policy

Minimise adverse effects on the Exe Estuary by minimising resource use, choosing reused and recycled products and low energy options and recycling waste - and encouraging others to do the same.

Issues

1. ▶ Impact of waste and disposal on habitats and biodiversity.
 - ▶ Visual impact of litter and other waste, including its impact on tourism.
 - ▶ Fly tipping.
2. ▶ Excessive amount of waste packaging on site and high costs of disposal.
 - ▶ Storm discharge from sewage treatment works in the Estuary waters.
 - ▶ Oil and other hydrocarbon pollution from boating activities and oil storage methods.
 - ▶ Sewage discharge from boating activities.
3. ▶ Increasing demand for recycling facilities.
4. ▶ Low level of public understanding of waste related issues.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ **Reduce the amount of waste, litter and fly tipping on the Estuary – reduced impact on wildlife and tourism.**
▶ **Promote regular beach and shoreline clean-ups.**
2. ▶ **Specify or encourage sustainable packaging when purchasing or contracting services and suppliers.**
▶ **Continue to improve the sewage treatment discharge programme and achieve consented conditions.**
▶ **Reduce oil and hydrocarbon pollution from storage on land and boating activities.**
▶ **Work with the harbour authority and water users to ensure good waste recycling facilities exist. Encourage marinas to produce their own strategies on waste management and pollution prevention.**
3. ▶ **Encourage and promote recycling and re-using opportunities arising within the Exe Estuary area, reducing the amount of waste requiring disposal.**
▶ **Ensure that the management of waste is as sustainable as possible in accordance with the waste hierarchy: reduce, re-use, recycle, energy recovery, disposal.**
▶ Investigate possibilities and promote the use of targeted recycling schemes and available funding.
4. ▶ Develop, adapt and raise awareness of recycling opportunities.
▶ Increase public awareness of waste and recycling.
▶ Re-invest recycling savings into relevant area.
5. ▶ **Identify new guidance on disposal and handling of waste on site.**

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

4.3 Recreation

4.4 Tourism

5.2 Water Quality

6.1 Education and Interpretation

6. Promoting Understanding of the Exe

6.1 Education and Interpretation

Key and statutory organisations:

- County, District & City Councils
- Natural England
- University of Exeter
- University of Plymouth
- RSPB
- Living with a Changing Coast project

Key documents, legislation and statutory plans:

- Devon County Council Educational Standards
- Dawlish Warren Management Plan, 2005
- Exmouth Local Nature Reserve Management Plan, 2000
- National Curriculum Guidance
- RSBP Exe Estuary Nature Reserve Management Plans, 1996



Image 17: Interpretation material at Dawlish Warren

Key achievements

- Information and interpretation boards have been installed at different sites along the Estuary.
- Improvements were made to the Dawlish Warren Visitor Centre with the support of the European Cycleau project.
- School group visits and supervision for student research are facilitated.

Policy

Ensure that the Estuary is sustainably promoted through an integrated information and interpretation strategy.

Issues

1. ▶ Lack of physical interpretation material on the Estuary.
▶ Lack of consistency in the interpretation of the Estuary.
2. ▶ Insufficient public understanding of the Estuary.
3. ▶ Lack of education facilities and facilitators focussed on the Estuary's biodiversity and geography.
▶ Lack of recognition for cultural and heritage features when providing access on and around the Estuary.
4. ▶ Lack of awareness of ongoing research studies within the EEMP.
▶ Lack of co-ordination between research studies led by statutory, voluntary organisations and universities.
▶ Limited dissemination of user-friendly results for research studies.
5. ▶ Lack of information about major issues related to life on and around the Estuary, the Estuary's economic value, resources and maximum capacity to support recreation, industries and activities.
▶ Insufficient understanding of the Estuary in association with local business.
▶ Lack of understanding of other users' activities and respect for their needs.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ► Ensure that an improved, consistent approach to interpretation of the many qualities of the Estuary is created.
2. ► Implement the development of an holistic and innovative promotion strategy for the Estuary.
3. ► Improve education and interpretation facilities around the Estuary, working with the Living with a Changing Coast project.
4. ► Develop a comprehensive metadatabase and improve communication of results and sharing of resources.
► Encourage co-ordination between ongoing surveys and develop partnership where possible.
5. ► Improve awareness and understanding on the following :
 - public contribution to global warming, and the likely impacts of climate change;
 - what can be done to prepare for or adapt to the impacts of climate change;
 - impact of flooding and erosion on people and the environment;
 - coastal processes, sea level rise, and climate change impact;
 - implications of climate change for the Estuary's habitat designations;
 - biodiversity issues;
 - landscape corridor value, culture, archaeology and heritage;
 - relationship between farming, land use and the Estuary;
 - all demands upon the Estuary;
 - water regulations and safe access to the water;
 - respect for all activities on the Estuary;
 - Estuary zonation;
 - Healthy and sustainable forms of transport;
 - an integrated public transport and public right of way network across and around the Estuary;
 - impact of local businesses on the Estuary;
 - impact of air and water quality;
 - the principle of the waste hierarchy, sustainable development and funding opportunities
 - renewable energy as a possible means for reducing environmental impact and bringing financial benefits;
 - risks of oil and chemical pollution.

This section is closely linked to the following:

2. Climate Change

3. Natural and Historical Environment

4 Use of the Exe

5. Environmental Quality

7. Protecting the Exe

7.1 Contingency Planning

Key and statutory organisations:

- Environment Agency
- Harbour Authority
- Local Authorities
- Maritime and Coastguard Agency
- Marine Response Centre
- Shoreline Response Centre
- Port Authorities
- Local Communities

Key documents, legislation and statutory Plans:

- Devon Coastal Pollution Plan, 2000
- Devon Flood Warning and Response Plan, 2004
- District Councils' plans
- Emergency Response Plans and the Joint Emergency Response Protocol
- National Contingency Plan for Marine Pollution
- Port Contingency Plan
- Voluntary Ship to Ship Transfer Regulations



Image 18: Boom deployment during Contingency Plan Exercise

Key achievements

- A contribution was made to the Contingency Plan review, regular boom development and practical exercises.
- High risk habitats and vulnerability to oil spills are identified thanks to the work carried out by the European EROCIPS (Emergency Response to coastal Oil, Chemical and Inert Pollution from Shipping) project.
- Lymestone Community Flood Plan and volunteer wardens to close flood gates.

Policy

Ensure the relevance of the Devon Oil Contingency Plan and regularly review the Exe Estuary Protection Plan

In case of an incident, ensure these Plans are implemented.

Issues

1. ▶ Risk of uncontrolled pollution, including oil and chemical spills.
 - ▶ The Devon County Oil Pollution Contingency Plan (produced 2000).
 - ▶ Need for a review of the Exe Estuary Booming Plan.
2. ▶ Pollution can potentially damage wildlife, habitats, human health and water quality, and will have an economic impact on related industries, including tourism.
3. ▶ Increase in shipping traffic carrying heavy crude oil and liquid natural gas.
 - ▶ Absence of regulations on ship to ship transfer - only a voluntary ban is in place.
 - ▶ Absence of an international convention to cover inert pollution.
4. ▶ Changes in waste regulations have affected the management and disposal of contamination from shipping incidents and are yet to be accommodated.
5. ▶ Lack of structures and procedures for the management of volunteers.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015).

1. ▶ **Implement the reviewed Devon Coastal Pollution Contingency Plan and carry out regular exercises.**
 - ▶ **Carry out a review of the Exe Estuary Booming Plan.**
 - ▶ **Keep informed of new techniques and equipment.**
2. ▶ Support research on wildlife and habitat recovery, and the impact of pollution on human health.
 - ▶ Support the work of wildlife protection organisations and provide resources in the event of an incident.
3. ▶ Investigate ways to increase legal protection covering pollution from shipping.
 - ▶ Work towards producing an international convention covering inert pollution.
4. ▶ **Identify new guidance on disposal and handling of waste on site.**
5. ▶ Identify and implement structures and procedures for the management of volunteers.
 - ▶ Improve awareness of the hazards that pollution poses for local people, volunteers and wildlife species and habitats.
 - ▶ Encourage the take up of community flood plans amongst Estuary communities.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

4.6 Commercial and Other Uses

5.2 Water Quality

5.3 Waste Management and Recycling

6.1 Education and Interpretation

7.2 Coastal Defence and Shoreline Management

Key and statutory organisations:

- County, District & City Councils
- Environment Agency
- Natural England
- Network Rail
- Living with a Changing Coast project

Key documents, legislation and statutory plans:

- Shoreline Management Plan
- Exe Estuary Coastal Management Study
- Exe Estuary Flood & Coastal Erosion Risk Management Strategy (F&CERMS)
- Local Development Framework documents
- Coastal Protection Act, 1949
- Devon County Council Structure Plan, 2001 to 2016
- Exe Catchment Flood Management Plan, 2004
- Devon Flood Warning and Response Plan
- Land Drainage Act, 1991
- Lyme Bay and South Devon Management Plan (SMP2- Revision)



Image 19: Coastal Defences at Exmouth

Key achievements

- The managed re-alignment at Goosemoor shows successful management and has considerably enhanced the biodiversity of the area.
- Diverse research has been undertaken by universities and the Environment Agency on coastal processes in the Estuary.

Policy

Ensure that the maintenance, planning and implementation of coastal defence strategies contribute to the sustainable use of the environment whilst minimising the risks associated with flooding and erosion.

Issues

1. ▶ Impact of flooding and coastal processes on the local population and built environment.
 - ▶ Uncertainty of risk linked to storm surges, flood and erosion.
 - ▶ Limited understanding of the impact of climate change.
2. ▶ Need for a better long term strategic approach to management of the coastal defences within the Shoreline Management Plan boundaries (will be achieved through the Exe Estuary F&CERMS).
 - ▶ Lack of a long term strategy for Dawlish Warren.
3. ▶ Lack of information on, and consistency of monitoring of sediment dynamics and coastal processes.
4. ▶ Deterioration and potential damage or loss of habitat, biodiversity, archaeological features. Impact on landscape character due to coastal defence development.
 - ▶ Potential impact of coastal defence on economic activities.
5. ▶ Low level of public awareness of the causes and effects of coastal processes on people, property and the environment (this is the rationale for the LiCCo project).
 - ▶ Increasing awareness of the need for a sustainable approach to coastal protection and flood defence in the future.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ Evaluate the risk of erosion and flooding on the Estuary's built environment and biodiversity.
▶ Continue to improve flood maps as part of the Environment Agency's Flood Risk Mapping Strategy.
▶ Avoid further development on floodplain and areas at risk, where possible.
▶ Understand and continue to evaluate the latest and long term impacts of climate change (e.g. through working with the Living with a Changing Coast (LiCCo) project).
2. ▶ Achieve stakeholder agreement to the Exe Estuary Flood and Coastal Erosion Risk Management Strategy (F&CERMS) and implement its findings (through working with the LiCCo project).
3. ▶ Implement the Southwest Strategic Regional Coastal Monitoring Programme.
▶ Implement the reviewed Shoreline Management Plan for Lyme Bay and South Devon (will be superseded by the Exe Estuary F&CERMS).
▶ Implement the Exe Catchment Flood Management Plan which includes the Exe Estuary.
▶ Implement the recommendations of the Exe Estuary Coastal Management Study (through the Exe Estuary F&CERMS).
4. ▶ Identify and address any local gaps in the knowledge of coastal processes on the Estuary and share results with other studies.
5. ▶ Ensure that, wherever possible, the creation of new intertidal habitats is seen as a natural form of sea defence which are protected, maintained and enhanced.
▶ Ensure that biodiversity, archaeology and landscape policies and guidance are adhered to when considering new coastal development.
▶ Analyse the impact of coastal defence and coastal management on economic activities.
6. ▶ Improve public awareness of the impact of tidal flooding, storms and coastal erosion on people, property and the environment through the LiCCo project.
▶ Improve public understanding of coastal processes, sea level rise, and the wider impacts of climate change (through the LiCCo project).

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

3.3 Landscape and Designations

3.4 History and Archaeology

4.3 Recreation

4.4 Tourism

4.6 Commercial and Other Uses

6.1 Education and Interpretation

7.3 Spatial Planning

7.3 Spatial Planning

Key and statutory organisations:

- County, District & City Councils
- Town and Parish Councils
- Local communities
- Environment Agency

Key documents, legislation and statutory plans:

- Local Development Plans and Framework documents
- Planning Acts, 1990 and 2004
- Planning and Compensation Act, 2004
- Regional Spatial Strategy for the South West, 2005



Image 20: Development on the Exe Estuary

Key achievements

- All Local Plans have been recently, or are in the process of being reviewed by the relevant Local Authorities.
- Comments have been provided on planning applications which may affect the Exe Estuary.

Policy

Encourage Local Authorities to promote and adhere to the concept of sustainable development when making provision for tourism, recreation, commerce and other forms of development.

Issues

1. ► Existence of 3 different Local Development Planning Frameworks around the Estuary.
► Potential inconsistency between the documents informing spatial planning decisions by the Exe Estuary Management Partnership.
2. ► Potential damage or loss of habitat, biodiversity, archaeological features, and the impact of development pressures on landscape character.
3. ► Vulnerability of development, and the potential cost of defending built areas in the flood plain and eroding areas.
4. ► Low public awareness of the restricted availability of sites suitable for development.
► Low public awareness of the potential impacts of coastal processes, floods and climate change on existing properties and built environment, or of when planning permission is required.

Objectives outlined in the 2006 – 2011 Management Plan (objectives highlighted in red text are to be addressed through the Interim Management Plan 2012-2015)

1. ▶ **Promote a planning protocol reflecting the views of the Exe Estuary Management Partnership through adopted and implemented Local Development Frameworks.**
 - ▶ Encourage a sustainable and long term approach to development.
 - ▶ **Ensure that Local Development Framework documents are consistent with the objectives for the management of the SPA, SSSI and SAC.**
2. ▶ Ensure that biodiversity, archaeology and landscape policies and guidance are adhered to when considering new developments.
3. ▶ Ensure consistency between Local Development Frameworks with regard to development in the flood plain and other areas at risk.
 - ▶ Ensure that both Local Development Frameworks and developments comply with the policies of the Shoreline Management Plan and emerging Exe Estuary F&CERMS.
4. ▶ Increase public awareness of the potential impacts of coastal processes, flooding and climate change on development through the LiCCo project.

This section is closely linked to the following:

2. Climate Change

3.1 Habitats and Designations

3.2 Wildlife

3.3 Landscape and Designations

3.4 History and Archaeology

4.3 Recreation

4.4 Tourism

4.5 Public Transport and Access

4.6 Commercial and Other Uses

6.1 Education and Interpretation

7.2 Coastal Defence and Shoreline Management

8. Conclusion

The Exe Estuary is an internationally important resource for both people and wildlife. It is treasured by residents and visitors alike for many different reasons, including its landscape, local population, aesthetic beauty, tranquility, diverse wildlife, history and archaeology. However, it is also a busy place, supporting a wide range of activities including: farming, fishing, recreation, tourism, transport and commercial and other uses. Competition for space is fierce.

A considerable amount of background information exists on various aspects of the Estuary. It has been used to help highlight the issues and identify targets over the last five years. However, climate change is an unknown factor, which could have a significant impact on all aspects of the Estuary. It is essential to continue to monitor and review management decisions to reflect climate change predictions.

A review of the Management Plan 2006-2011 was carried out during 2011 and 2012, the results of which can be found in the Management Plan Review spreadsheet and Management Plan Review Summary report. The review identified a number of objectives that were not delivered during this five year period. These objectives are highlighted within this Interim Management Plan, to be addressed over the next three years, after which a further review will be carried out.

It is a challenge to manage this special place and avoid conflicts between different interests, whilst protecting, maintaining and enhancing environmental quality. Targets for the next three years will guide our work towards a sustainable future.

The Exe Estuary Interim Management Plan 2012-2015 will be implemented through practical and effective actions to be achieved by the Exe Estuary Management Partnership and in part delivered by the Exe Estuary Officer. The annual "Exe Estuary Action Plan" will list the priority actions for each year.

The Exe Estuary environment is constantly changing, and it is important that the changes are monitored continuously and the findings shared with partners. This will enable the creation of a continuous record of information about the different aspects of the Estuary, and provide a sound basis for informing future management decisions.



